Convocation 1998

Highlights of Convocation 1998 where more than 5,200 students received degrees.

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What do we do with bad kids?

Are changes to the Young Offenders Act tough, or fluff?

Next Folio

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NANUC signals new cooperative era of research

Governments, researchers and universities join forces for \$5.467 million centre.

By Lee Elliott

Researchers who last week celebrated the symbolic groundbreaking of the new \$5.467 million National High Field Nuclear Magnetic Resonance Centre, dubbed NANUC, see it as a sign of good things to come for research scientists in Canada.

The new facility, to be built at the southeast corner of the Heritage Medical Building, is a cooperative effort between provincial and federal governments, other Canadian universities and researchers.

Bruce Lix, nuclear magnetic resonance (NMR) spectrometer technician, says the cooperative spirit is "tangible evidence of government reinvesting in research. It's a good indication for Canadian science," he said. "I think it buoys the hope for some."

The most important feature of NANUC is the 800 MHz NMRs that will be at its heart. The 800 MHz is the highest field strength available in the world, and while there are other 800s in Canada, this is the first in Western Canada and the first to be opened to researchers and industry across Canada through electronic links.

"A lot of what industry will be buying is not just the technology, but the expertise on campus," says Lix. "In an ideal world, we'd like to make enough off the industries to make it available completely free of charge for university researchers."

So what exactly can the 800 MHz NMR do? It allows researchers to look very closely at the molecular level. "It's a tool that fits into what's happening in the world of science right now," says Lix. In the human genome project, for instance, researchers are discovering hundreds of new proteins a week. The



Anne McLellan, federal justice minister and attorney general, places a sample of DNA in an NMR machine.

challenge is to find out what they do.

"In this instance, it's a case of function follows form," says Lix. Once researchers can see a 3D image of the protein they can begin working on ways to either block it or replicate it. Lix likens it to closely examining a lock and key.

"Once you know what the key looks like, you can make a duplicate. It's allowing us to look for the design of little

molecular keys and alter the functions of the protein."

The advantage of the bigger machine is that it allows researchers to look at bigger things. At the molecular level, there's a lot of complexity and overlap, "you can't tell that one signal belongs to one thing and not another," says Lix. It's like trying to read type on multiple sheets of overhead film stuck together. It's non-

sense until you separate the sheets and read them one at a time, he says.

The other big advantage is speed. At the level of 3D spectrometry, "it will make a routine study almost an order of magnitude faster," he said.

Lix says researchers across campus are expressing interest in the machine. Its capabilities don't just apply to biochemistry. The National Centre for Upgrader Technology in Devon will be using the NMR for research in the oil and gas industry and it has direct applications to research in the pulp and paper, food and agricultural industries.

The Universities of Calgary, British Columbia, Manitoba, Western Ontario, Toronto and Simon Fraser, the Alberta Cancer Board and several of the world's major pharmaceutical companies are partners in NANUC. They will be able to link to the NMR through the Internet.

NANUC is jointly funded by

- Alberta Advanced Education and Career Development
- Alberta Science and Research Authority
- Alberta Heritage Foundation for Medical Research
- Medical Research Council of Canada
- Western Economic Diversification
 Construction for NANUC is expected to begin

in June with completion in the fall 1998.

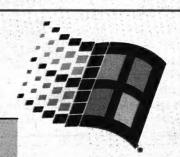
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Calgary alumni goes to the horses

Attendance doubles at popular Spruce Meadows event

By Louise J. McEachern

lumni gathered at the U of A's third Alumni gattiered in Annual alumni Spruce Meadows event-Calgary branch to meet old and new friends and find out just how the U of A vision is being realized.

Dr. David Lynch; dean of engineering, was guest speaker after the group had watched a elite equestrian jumping compe-

"Recruiting the best outstanding students, providing the absolute highest quality of education, and obtaining and using the right resources in a variety of ways is why we (the U of A) exist," says Lynch. "We have to get our message out directly if we want to recruit the best students and

Lynch gave a couple of sterling examples of the types of students the U of A now attracts. Agnes Yuen and Tim Poon, have won the CD Howe Foundation Awards. This is a national competition that recognizes the top male and female students in engineering for their first year's achievements-in academics, leadership, and extracurricular activities. "This is just one example of how the university is helping future generations realize their goals now," says Lynch.

"This is a great opportunity for people to get together and catch up," says Mary Donnelly '67 BEd. She and her husband, Bob'65 BSc(Eng), '68 PhD(Eng) were joined by their two daughters, and their friends from Iran and Norway who were impressed with the facility and the people. "This is our first time at the Spruce Meadows alumni event," says Bob. "And we'll probably be back next year."

Identical twin sisters Nettie Pedlar (Garfield) '38 BSc(Nu), and Helen Sabin



A competitor warms up for her ride as part of the day's entertainment for U of A alumni.

(Garfield), '38 BSc(Nu) were also on hand to enjoy the evening's festivities.

"The event exceeded our expectations," says Susan Peirce, director alumni affairs. "The pavillion was actually at over capacity with more than 200 alumni guests and friends."

The Calgary alumni branch is U of A's oldest and largest with more than 12,000

grads. Keith Sveinson '56 BSc(Ag), Calgary branch president, was very grateful to all who helped organize the event, especially to the volunteers "who are the lifeblood of the alumni association." He offered special thanks to Ron and Marg Southern who opened the doors of their world-class equestrian facility for the occasion.

Government seeks advice

By Geoff McMaster

f you think federal bureaucrats have their fingers nowhere near the pulse of change, now's your chance to give them a' piece of your mind. Government policy makers are asking academics and independent researchers to help them chart the course into the next century.

The Joint Project on Trends (a partnership between The Policy Research Secretariat and the Social Sciences and Humanities Research Council of Canada) is trying to identify social, cultural, and economic knowledge "gaps" of crucial importance to the country's growth, with a view to making more informed policy decisions.

Just how the government ultimately makes these decisions is always somewhat mysterious, says University of Alberta economist Dr. Ken Norrie. But this initiative at least demonstrates a clear intention to take seriously what academics have to say about Canada's future.

"It's as good a chance as any academic will ever have to have an influence," says Norrie. "They've certainly set up the institutions to do it. Normally if you're an academic, you do good policy work and you publish it somewhere, and it may or may not get noticed, and it may or may not get fed in. There's a process none of us really understand as to why some ideas catch on and some don't."

"What they've done (now) is set up a process where if the work is any good, it will necessarily get noticed. They're going to set up these policy conferences, so the stuff will be fed right in."

SSHRC has set aside \$225,000 for the project, offering individual researchers \$5,000 each for critical essays of 30 to 75 pages targeting one of eight "trends" in relation to four themes: society, economy, culture and governance. The eight trends include globalization, North American integration, technological change and the

information revolution, the environment, demographics-aging, value change, multiple centres of power and social differentiation. Drafts of the selected papers will be delivered next year at conferences across Canada and then collected for publication.

Norrie will lead the North American integration team, organizing a conference on that theme next year at the University of Alberta. Aside from a good chance results will actually make a difference in steering policy, what excites Norrie most about Project on Trends is its sweeping interdisciplinary approach, especially "the opportunity to force this thinking across sociology and across some of the humani-

According to SSHRC's outline of the project, the aim is not to present new research, but to "review and synthesize current knowledge." It also allows for "unconventional methods of synthesis and presentation, as well as the development of provocative/speculative arguments."

Norrie expects his own team will look at Canada's changing relationship to the U.S. under pressures from such forces as NAFTA and the technological revolution. "In other words, is this a different relationship than it has been historically?" Because there are huge cultural issues at stake in this transformation, he hopes to include disciplines as seemingly unrelated to the economy as English, fine arts, and commu-

Proposals from all Canadian researchers, including non-academics, are eligible for funding, except those that address the mandate of the researcher's regular employer. Candidates must submit to SSHRC a proposal and resume, each no longer than two pages, by June 15. The documents may be submitted electronically to Collaborative@sshrc.ca. Results will be announced July 10.

Ubiquitous thin film focus of engineering research

By Lucianna Ciccocioppo

hey're on your windows, eyeglasses, food wrappers and door knobs. They're in textiles, microelectronics, drill bits, hard drives and magnetic tapes. They're also on your money-as anti-counterfeit holo-

Thin films, an important fundamental technology, are found everywhere. And here at the U of A, research in a unique, inventive class of thin films has just been given a boost. The Faculty of Engineering recently launched a senior industrial research chair in thin film engineering.

Funded by the Alberta Microelectronic Corporation (AMC) and the Natural Sciences and Engineering Research Council of Canada (NSERC), the \$2.2 million AMC/ NSERC Chair research program will investigate patented, innovative thin film engineering technologies called "GLAD" (glancing angle deposition). These technologies have broad applications in fields such as micro-electro-mechanical systems, optics, magnetics, acoustics, biomedical engineering and catalysis.

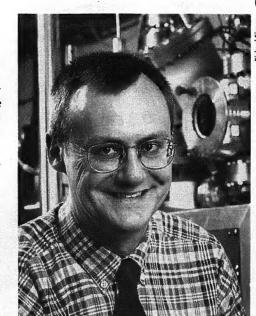
Dr. Michael Brett, professor of electrical and computing engineering, and director of engineering physics is the chairholder. He is internationally recognized in the area of thin film microstructures. Five graduate students, three research associates, the chair-holder and a junior faculty member will form the core research team.

"It's a different approach to fundamental research," says Brett. "It's exciting because it's a new technology, with more control. It opens up another whole dimension of high-tech applications."

The chair research program will create the Canadian infrastructure for the study and development of GLAD thin films with microscopic internal structures that look like beds of micro-springs, staircases or zigzags. While thin films are conventionally constructed as smooth, hard and dense materials, GLAD thin films are unique because of their structure and porous nature.

"AMC's sponsorship of Dr. Brett and the University of Alberta will be an important element in our future," says Chris Lumb, AMC president and CEO. "This research program will lead to development of new technologies, new business opportunities, and most importantly, skilled people who can further develop Canada's technology industries."

"Dr. Brett has an impressive track record and a long association with NSERC. He has held NSERC funding since 1985. starting first with an NSERC Postdoctoral Fellowship, followed by a University Research Fellowship," said Dr. Suzanne Fortier, vice-president of NSERC. "He is an accomplished researcher, who has pioneered the use of glancing angle deposition of thin films."



Dr. Michael Brett

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...it makes sense

foliofocus

What do we do with bad kids?

Are changes to the Young Offenders Act tough, or fluff?

By Louise J. McEachern

What do we do when kids are bad— really, really bad? What do we do when they pillage, rape, and kill? How do we balance holding them accountable with giving them the chance to learn from mistakes—and at the same time protect society?

Whether the recent changes to the Young Offenders Act are meaningful or merely cosmetic depends entirely on one's interpretation. Although the new strategy is not a radical departure from the YOA, Dr. Bruce Elman, professor of law thinks the shift in emphasis is important.

"[The act] will in fact get tough with violent youth offenders, call them to task, hold them responsible, and give them appropriate penalties." This means more violent young offenders will be tried in adult court and fewer non-violent offenders will be incarcerated.

"We have loosened the strings of support, then demanded tough laws to deal with the children of people increasingly unable to sustain a family let alone to parent."

Dr. James Creechan

Dr. James Creechan, professor of sociology at the Centre for Criminological Research is not convinced. He thinks the changes are a merely a public relations exercise. "Legislation doesn't change behavior, social programs do," he says.

The YOA, introduced in 1984, was the result of arduous negotiation. "It [the Young Offenders Act] did exactly what the negotiation process had asked them to do," says Creechan. "It got tougher, it sent kids away for longer periods of time, it put more of them away, it made them more accountable. Twenty-five years of research went into creating the YOA and it is not going to be replaced in six months."

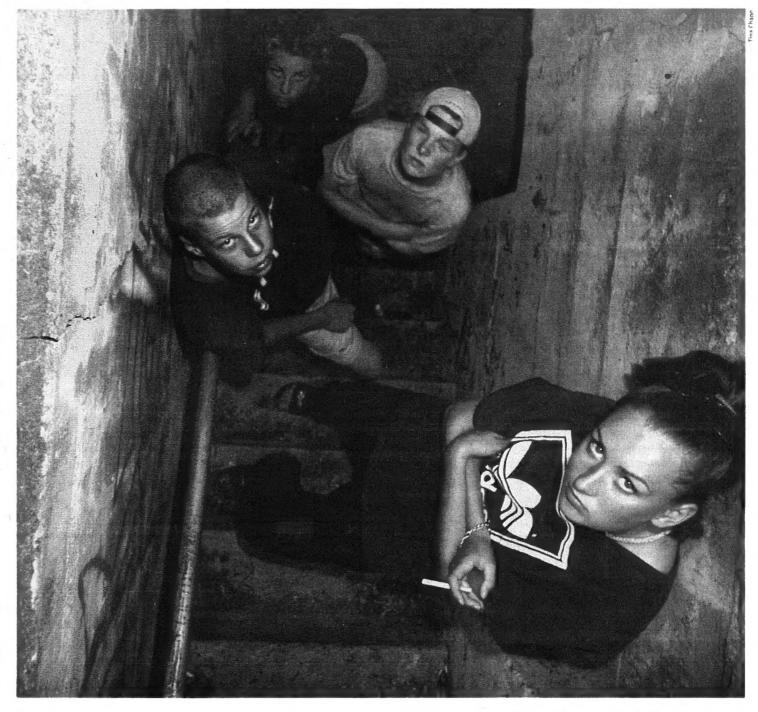
Then why is Anne McLellan, federal justice minister and attorney general,

Elman believes the government is feeling pushed into making amendments to the YOA: "There is a public perception that crime is increasing, that violent crime engaged by youth is out of control, that the YOA is not working and is indeed inappropriate."

Naturally, the government is interested in meeting this public perception. "The

- In 1997, 110,000 kids were charged under the YOA
- In 1996, 54 youth were charged with homicide in Canada
- In 1996, violent crime accounted for 17 per cent of all youth crime-two per cent of which includes homicide, attempted murder, abduction, other sexual offences.
- In 1996, property crimes accounted for 52 per cent of youth crime.
- Currently the federal justice department spends only \$2.2 million on crime prevention-none of which is allocated to communities
- · The new amendments will affect between 150-200 youth that could now be tried in adult court.





truth of the matter is that youth crime is not out of control," says Elman. "The statistics indicate that youth crime has actually declined over the past number of years."

Creechan agrees. He thinks MacLellan's major concern is the public perception of the YOA. "The public is just wrong. They have no idea what the YOA does. They have no idea of how effective it has been.'

When the act was introduced in 1984, those responsible for promoting and highlighting the benefits didn't do their job, says Creechan. "Public perception was fueled by a really lousy public relations job done by the Department of Justice to sell it [in 1984] and so now they are trying to make up for that," he says.

Nonetheless, the government is charging ahead with a replacement program, called the Youth Criminal Justice Act. 'Putting the public first' is its priority and it will be implemented in three ways.

The first is a strong prevention component linked to school and social programs and the federal Crime Prevention Initiative, the National Children's Agenda, and the Royal Commission on Aboriginal Peoples. A \$32 million Crime Prevention Initiative is aimed at developing communitybased responses to crime, with a particular emphasis on children and youth.

The second initiative gets tough on crime. More young offenders could be transferred to adult court and become eligible for adult sentences. A new 'patterns

of convictions for serious violent offences' category has been added. In addition, youth charged with serious crimes-murder, attempted murder, manslaughter or aggravated sexual assault may be tried as adults when they're as young as 14 (down from 16). It will be easier to disclose the identity of the youth after conviction and the time between the conviction and sentencing will also be reduced.

The third strategy of the new act includes a full-range of community-based sentencing. "What do they learn in jail?" asks Elman. "They learn how to be better criminals and they become more violent. So it just exacerbates the problem." Police warnings, group counseling, victimoffender mediation, and other diversions to reduce the number of youth in custody make more sense, he says.

The problems with young offenders do not lie completely with a faulty act or the public's perception of the act but also with our social strategy, says Creechan. "At the same time the YOA legislation was admitted, a report was also released indicating a record number of children living in poverty," he says. "Failure of our social safety net is contributing to why children are ending up in court." He feels cuts to assistance programs for children in poverty foster the very breeding ground for delinquency. "We have loosened the strings of support, then demanded tough laws to deal with the children of people increasingly unable to sustain a family let alone to parent."

Anne McLellan, attorney general and federal minister of justice, has proposed changing the Young Offenders Act to the Youth Criminal Justice Act. This set of proposals (and name change) will be translated into a bill in the fall.

She proposes the following main changes:

- Offenders as young as 14 to be tried in adult court when charged with serious, violent crimes.
- \$30 million spending in crime prevention programs (up from \$2.2 million).
- Development of communitybased sentencing for non-violent offenders.

Both Elman and Creechan believe the minister and the Department of Justice must convince the public that the current youth justice system works. It just needs some fine-tuning. The long-term solution? Early identification of problems in schools

and rehabilitation programs. "I hope she (McLellan) can garner public support this time and allocate the necessary funds for social services and rehabil tation programs to make it work," says Creechan.

President's visit sets stage for better health care in Japan

U of A and Sapporo Medical University join forces for Telehealth

By Lee Elliott

When President Rod Fraser met last month with the vice-governor of Hokkaido, Japan, Tatsuo Maruyama, they agreed on a collaboration that will mean a sick child in a small Japanese village can get expert medical care without having to leave her home village.

The key to this care, for the child and thousands of other rural Japanese residents, will be Telehealth. The concept of Telehealth is familiar to the U of A community where three Telehealth sites are set up to provide expert medical video consul-

- CHINA: Since 1983, five projects between the University of Alberta and Chinese partners have been completed. These range from faculty skills development to mining and agriculture. The U of A currently maintains links with eight Chinese universities collaborating on projects in business, engineering and occupational health.
- Last year, 129 students from China attended the University of Alberta, primarily at a graduate studies level.
- JAPAN: The University of Alberta has more than 20 memorandums of understanding with Japanese universities including Chiba University, Mejii University and the Tobo University. These agreements cover student and staff exchanges as well as research
- Last year, 31 degree-seeking students from Japan attended the U of A and 399 Japanese students registered in the Faculty of Extension's English Language Program.
- A comprehensive Japanese studies program is offered at the University of Alberta through the Department of East Asian Studies and a B.Comm in Japanese studies is available through the Faculty of Business.



tation with rural doctors and patients. X-rays, CAT scans, ultra sound images and other diagnostic tests are transmitted by supporting computers while medical specialists can discuss, in real time, results and treatment with both the patient and his or her rural physician.

As a result of the president's recent trip to China and Japan, one of the U of A's partner institutions, Sapporo Medical University in Hokkaido, Japan will soon be similarly equipped.

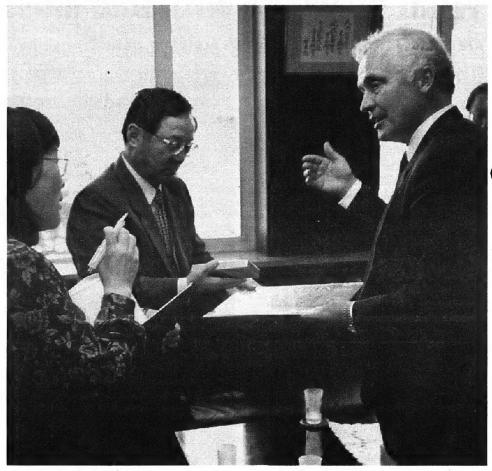
Professor Mazako Miyazaki, director of the U of A TeleHealth Centre, went to Japan with Fraser and identified Sapporo as the ideal place to serve as a base for the U of A's TeleHealth network's global links. "When you start to go around the globe, as you can imagine, the communication lines are not always that clean," she says.

Sapporo Medical University saw clear benefits to the collaboration. "They were very excited by the potential of the program we have set up here," says Fraser. "Japan has many of the same problems we have when it comes to providing specialized medical care to rural communities."

"But," says Miyazaki, "in order to forge ahead with Telehealth, Sapporo needed provincial funding." To that end, Fraser and Miyazaki, along with a delegation from Sapporo, met with the vice-governor, who pledged his support. Fraser later met with the federal leader of the upper house in Tokyo who promised federal support as well.

"Sapporo University is intent on becoming a very high-calibre research institution," says Fraser. "We have the edge in being innovators in this particular field, but we'll gain as much knowledge as we share in this collaboration."

One of the more immediate gains is the chance to test some of the finest Japanese technology—not yet on the market. "President Fraser's presence in Japan was critical," says Miyazaki. "In dealing with Japanese industries it's very important to have



President Rod Fraser (right) offers a gift to Tatsuo Maruyama, Vice-Governor of Hokkaido, Japan.

the backing of the president of the university. It's a part of their culture."

With the help of Fraser then, they were able to enter into agreements with Sony, the Nippon Telecommunications Corporation and the Hokkaido branch of Mitsubishi Electronics to test equipment before it hits the market. Telehealth will being testing the equipment this summer.

CHINA CONNECTION

Fraser's Asian visit included China. While there, Fraser . . .

- made a presentation to the Canada-China University President's Conference in Nanjing, China on the U of A's management of science and technology, focusing on research excellence.
 Twenty-six Chinese university presidents and 24 from Canada attended the conference, sponsored by CIDA
- attended 100th Anniversary celebrations for Beida, Peking University,
 China's pre-eminent post-secondary institution and a U of A partner in research.

Opinion guest column

Bottom lining education

By Dr. Christopher Levan, principal St. Stephen's College

I'm not in the driver's seat, so I can't know all the signals. But from the outside, the principal's decision looked particularly heartless. A small boy, Paul by name, captive in his own unique orbit and largely unable to cope with the rush and bustle of a regular classroom, is going to have his last prop pulled out from under his fragile world.

The argument is simple. The school's budget can't stretch to cover Paul's special needs. Anabel, his teacher's aide (TA), is toast. "It's time to get back into the regular classroom and make your own way. In a time of fiscal restraint, extraordinary expenditures are impossible."

I suppose it's a daily occurrence across the continent, but this one touched home. Paul had enjoyed and depended upon the assurance that his TA has provided over the past few months. According to his own reckoning, this very patient woman was one of the few hopeful signs on the horizon of his life.

Parents, both working and frayed at the edges and having three other children to

mind, didn't seem to have the time to pierce his durable exterior and find the boy inside. Teachers and school functionaries were likewise overworked. To them he was a "problem." Of course, they would never tell him that directly. But the sighs he heard behind his back, the upward cast glances that he caught out of the corner of his eye all spoke of the weariness that his superiors felt when he came into range.

The message was clear enough: Paul takes work.

Consequently, losing the lifeline of Anabel's constant nurturing is a blow. A child who was coping, albeit with considerable effort, is now a financial burden. Parents are furious, Anabel is dismayed, and Paul is lost.

It is easy to stand at a distance and toss indignant darts at heartless bureaucrats who rob children of their chance in life. Paul's dilemma is not so much a clarion call to action as a parable about our world. He embodies the bottom lining of education and many other related enterprises.

The Alberta Advantage is not free. It is purchased on the backs of the diminished and powerless. If we stand firm on the expectation of a constantly increasing GNP, the economical imperative of growth and a social assumption of progress, the Pauls of our community will lose. Those people who do not fit, can not produce, or who require extra attention are anomalies in the system, placing a drag on our streamlined efficiency and lowering our performance indicators.

And let's be honest, Paul presents some industrial strength trials. He can't learn as quickly as others and he soaks up any teacher's time like a giant sponge. And his few mountaintop insights are separated by long stretches of wilderness reversals. No joke!

But when we choose to allow the economics of our culture to roll over and flatten folk like Paul—the bumps in our smooth road to success—we choose a one dimensionally shallow society. Is it not people like Paul who help us to appreciate the important aspects of living?

On the other hand, we must be careful not to patronize Paul and those like him, as if impairment has an implicit virtue. But he does force us to ask the ultimate questions of worth. Are our commonly held standards of achievement all that eternal? His dilemma makes me question the predominance of the principles of efficiency and productivity, as if speed and volume mattered in the end.

In the final analysis, education is not about an accumulation of facts, the rapid processing of data, or the fine tuning of industrial skills. It's about wisdom: the ongoing dialogue between playfulness, self-knowledge and the passion for a better world. It's about becoming good neighbors, brothers and sisters to all we meet.

Thank goodness for the Pauls who make the way of wisdom worthwhile because it's not the end result, the last line on the tally sheet that counts. In the end it's the journey that matters.



Eavesdropping on the 'Net

Will the U of A thrive and survive in the "new economy"? Members of the Academic Technologies for Learning (ATL) user group grappled online with the issue last week and agreed to share their discussion with Folio.

IS THE U OF A A "NEW ECONOMY COMPANY"?

Dr. Terry Anderson, professor and director ATL, Faculty of Extension

June 3, 1998: Reading the latest *Wired* magazine (June, P. 172) last night, I stumbled upon *Wired's* list of 40 companies that they believe will thrive in the "new economy." I mentally went through the list of criteria trying to assess the U. of A. on each.

One could argue that a university is not a company and that such comparisons are not useful. On the other hand schools like Phoenix University and the Graduate School of America are unabashedly "companies" and are competing directly with us in the teaching component of our mandate.

Anyway, here are the criteria. A "new economy" company excels at

- 1. Globalism: exploiting worldwide markets and open systems
- 2. Communications: Building brands and mindshare networking (I have no idea what "mindshare networking" is, but plan to drop the phrase at the next cocktail party:-))
- 3. Innovation: Creating and utilizing new ideas: speed and agility
- 4. Technology: Using new tools to maximum effect: adaptation
- Strategic vision: Understanding how to be in the right place and stay there.
 Anyone brave enough to venture a

Anyone brave enough to venture a grade (on a U. of A. 9 point scale of course!) on our university's performance on the above?

I'LL BITE—IT'S LUNCH HOUR ANYWAY

Dave Trautman, ATL

June 3, 1998. Terry Anderson wrote:
1. Globalism: exploiting worldwide markets and open systems

We do exploit global markets for students. And we have a pretty open system for attendance and public use of facilities. We also try to make use of the conventional wisdom when it comes to keeping our "systems" from becoming selfcentered and closed.

2. Communications: Building brands and mindshare networking (I have no idea what "mindshare networking" is, but plan to drop the phrase at the next cocktail party:-))

We are constantly working to build our brand name within Canada and our reputation in some circles is pretty darn good. Overseas we have to line up behind more well known brands like Harvard, Stanford, and the like.

Of course if people playing college aged kids in Hollywood movies were agonizing over which school to attend (Calgary or Edmonton) then perhaps more of the world would consider us an "important place" to be educated in. Perhaps we need product placement.

Mindshare is that business-babble marketing thing which obliquely refers to how well our "name" stays with people. I can think that within Edmonton the "U of A" is a high quality brand which easily comes to mind. In Lethbridge or Calgary their own local is likely to have more mindshare. If people spend any time thinking about the U of A as a result of reading the paper, or seeing us on TV or from something their neighbor said about

us, then we have good mind share. Our trouble is we have a brand without a consumable. In that context mindshare is not something we can exploit to our advantage.

3. Innovation: Creating and utilizing new ideas: speed and agility

As a research institution I have to believe we are innovating and utilizing new ideas. I've had the fortune to have met some of the brightest and most innovative researchers on this campus in a whole range of disciplines and I think we have perhaps 15 of the best people on the planet in some areas and another larger number of (as yet) unrecognized leaders in their fields.

Our speed is not too good. Our agility leaves a lot to be desired. But as Terry cautioned, this is not private enterprise we're dealing with. Our accountability is to the parents of the children who attend our classes and not to a product consuming public. We really only need to be as agile or as fast as our competitors for these students. On this scale I think we're about even with the crowd.

4.Technology: Using new tools to maximum effect: adaptation

I think this university adapts pretty well. Not all of its faculty is on side with everything, but I think that just reflects the diversity which comes from our size. When taken against the kinds of technology implementations I've seen with really big companies in the past, I think the U of A leads. The U of A regularly uses tools long before mainstream conglomerates ever contemplate the invoice.

The Microelectronics Design Lab was a great example for me of this leading aspect. At the time the centre opened everyone I knew was talking about CAD and CAM innovations because of what was being written and reported from Japan and the United States. Students and faculty here could practice and learn and explore true CAD design technologies at a time when Douglas Cardinal was only beginning to replace his draftsmen with the digitizing tablet.

5. Strategic vision: Understanding how to be in the right place and stay there.

It's fairly easy to say the university's politic is much more democratic and consensual than with fast moving global reach corporations. If the vision of the founders of a company is lost or becomes unworkable over time there are catastrophic consequences when trying to improve or change it. It's a political thing. Our university chooses leadership at many levels and with many different priorities. Hopefully when things are working right the overall vision is adopted at other levels and the individual vision within a faculty or even within a department can operate without generating conflict between the levels.

Of course, in some ways we cannot avoid conflict within the kind of structure necessary to run a university. I think this university handles conflict within itself quite well. Of course I may not suffer the dire consequences of those conflicts in my line of work so perhaps I haven't enough experience to know of what I speak. As much as a "vision thing" actually contributes to the success of an organization (which is doubtful to me when I think of corporate visions) it really comes down to being able to realize all of the potential within an organization no matter what vision is adopted.

I give us a 7.5

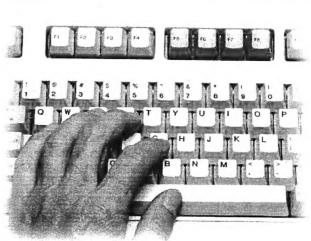
THANKS TO FIVE BRAVE SOULS

Dr. Terry Anderson

June 5, 1998. Thanks to five brave souls who responded to my "new economy" posting earlier this week. Dave Trautman's 7.5 was posted to this list. We received a high eight from an external friend of the university a "resounding failure" from another faculty member; a faculty member who gave us a seven or eight on innovation, but "much lower" on implementation and finally a comment that mirrors my own view, that seeks to separate our "score" between the teaching and research components of our organization.

I didn't need to ask Stephen Murgatroyd's opinion (see today's article in the *Journal*) who thinks we are an "anachronism."

My own views are related to the need for the U. of A. to climb out of its campus shell, and assert our presence and the value of our academic contributions on a global scale (see http://iroquois.ucs. ualberta.ca/HyperDispatch14/Distance-Education.html for an article that Randy Garrison and I wrote for *Dispatch* related to this view). I believe that our research performance is "world class" and continues to enhance our prestige and our capacity to serve our disciplines, the public and our students now, and in the "new economy."



However, despite our efforts at enhancing classroom delivery through "smart classrooms," video conference facilities and Internet support, we have a long ways to go on the teaching side of the house. We need a systematic program that ensures that the teaching function is truly valued, that admin and support systems are geared to support innovation in teaching, that incentives exist at the faculty, department and individual prof level, a marketing program that capitalizes on our teaching products and a commitment to insure (and measure our progress) as we become "leaders in learning."

It is only by ensuring excellence in teaching at all levels—certificate, non-credit, undergraduate graduate, professional and continuing professional that we will continue to receive the support and funding necessary to maintain our research function. Further, we have to realize that teaching means more than classroom instruction. Learners desire and demand alternatives that match their learning styles, time commitments and geographical constraints.

I ramble on.... but welcome your comments.

THE VIEW FROM HONG KONG

Dr. Mark Green, professor (On Sabbatical. July 1, '97 to June 30, '98) Department of Computing Science

June 5, 1998. I meant to respond to Terry's original message but didn't have time (I know that's a common excuse).

I'm close to the end of a three-month visiting appointment at the City University of Hong Kong. The external view of the U of A has been quite interesting and I thought I would share my thoughts.

Within the academic community we have a very good reputation, both for research and teaching. Virtually every person I have talked to has a very high opinion of the U of A. This was very encouraging. The disappointing part, as usual, was our reputation outside of the academic community. Many of the British and Australian universities advertise very heavily here for students. There are some advertisements from Canadian universities, Toronto, McGill and Western seem to be the most common.

This point was really driven home to me by one of my relatives. They mentioned to me several British universities, which I had never heard of, and asked me why U of A wasn't near as good as these universities. While in reality, we are much better, the community that we are trying to recruit students from (and donations as

well), doesn't know that. In this case advertising really pays!

This raises they thorny issue of how we should be promoting ourselves. As academics we like to be known by our contributions to our field. But, unfortunately, the general public doesn't see this, so we need some way of communicating that. How do we do that without looking like used car salesmen (used university salesmen:-))?

I wouldn't be as negative on the teaching side as Terry. Recently I had lunch with a young professor from another university in Hong Kong, and he gave me a long story about how teaching is used as a punishment at his university. While we may not reward good teaching enough, we certainly don't view teaching as punishment!

Since we are slightly isolated up in Edmonton, there is a tendency to have a more negative view of our situation than is really the case. It's hard for us to get out to lunch with someone from a different university to get another perspective on our problems.

I think the most important thing for us to do at the present time is to build more contacts between departments and faculties. This will give us more opportunities to exchange ideas, build on each other's expertise, and possibly show our students that there is something in common between the different courses and departments that they study in. •

Friendly fires

By Geoff McMaster

Albertans know forest fires can be terrifying, voracious and deadly, appearing to leave complete devastation in their wake. And as the recent example near Swan Hills demonstrated in stark relief, fighting them is costly and dangerous.

Obviously fires must be stopped when they threaten human lives or property. But according to Paul Woodard, associate dean of Agriculture, Forestry and Home Economics, human fear can produce the misconception that fire destroys the environment.

"Fires are not necessarily a bad thing," he says. "In some cases there is no value in fighting the fire."

Woodard has spent much of his career helping to fight forest fires in one capacity or another and says the government too often responds with a knee-jerk reaction in deciding where and when they should be stopped, "not because it's the right answer but because it's the politically correct answer." Since fire is part of a natural process of rejuvenation, recycling nutrients back into the earth, it's sometimes better to simply surrender and say, 'burn baby burn'

"When it's burning in areas where there's no human development or lives at risk, such as in the far northern part of the province where we have a very short growing season, thin soil profiles, and there's not likely to be much commercial value in terms of old trees, we probably can afford to let nature take its course. "

Many species of plants and animals have learned to adapt to fire, and in some cases even benefit from it. Woodard says there is a great deal of evidence to suggest larch pine and black spruce cones, for ex-



ample, open best in the presence of firegenerated heat.

New growth following a fire is also the best source of food for herbivores, many of which find it difficult to feed on the high foliage of a more mature canopy. The burning replaces the mature forest with a different kind of ecosystem, but one just as essential to sustained plant and animal life.

"New plant communities have high concentrations of berries and ferns, and other kinds of perennials," says Woodard. "These young, shorter plants turn out to be the basis of food for most herbivores. Deer, moose and elk can't eat trees when the foliage is above their reach." Many heavily browsed plants in old-growth forest de-

velop toxins rendering them unpalatable; fire recycles these plants so animals can once again eat them.

Even bears will do much better in burnt over areas, as berry crops tend to "take off" following a fire, says Woodard. Dead logs attract grubs and ants, which are also preferred by bear.

Smaller animals, however, such as squirrels and martins, do not fare quite so well. They don't move as quickly to escape the blaze and depend on mature forest canopy to survive. Even so, says Woodard, "we very rarely hear about dead animals," since many of them seem remarkably adept at finding shelter in rock crevices or wet areas. In one observed Australian case, an animal fleeing a fire actually turned



back into a burned out area and lived, says Woodard.

Woodard does acknowledge that allowing fires to burn is a gamble. They may not start anywhere near human communities, but they can spread rapidly and unpredictably. After a certain point, he says, "there's not a whole lot humans can do to extinguish them."

In Yellowstone National Park, for instance, it has been official policy since the 1970's to let fires run their course. But in 1988 several fires there burned out of control and destroyed much of the park.

For this reason, Woodard believes we should always approach a fire with our eyes open, fully aware of what is to be gained, or lost, by trying to put it out.

Chrohn's patients soar through phase two clinical trials

By Geoff McMaster

As a young nurse caring for a patient with Crohn's disease twelve years ago, Dori Vanstolk would thank her lucky stars she didn't have the debilitating condition herself. And then the unthinkable happened. She began to come down with all the symptoms—bouts of diarrhea, swelling of the joints, and marks on her legs. Soon she was on a steroid treatment program almost as bad as the disease itself. She suffered mood swings, depression and weight gain "in the weirdest places."

Last summer, after having tried every conventional and alternative treatment she could find, Vanstolk heard about a clinical trial for a promising new drug run by U of A immunologist Dr. Bruce Yacyshyn. She signed on, and after only five days of treatment found most of the symptoms disappeared.

"It didn't happen the next day or anything, but over a period of two or three months I just kept feeling better...able to get off the steroids and start doing more of the things I enjoy doing," she says.

"One of the things it did is get me out of that rut. I was in a sort of a vicious cycle of spiraling downhill. Now I have the strength where if I have a bad day, well, tomorrow will be a better day and I can get on with it."

Last Monday Yacyshyn announced the completion of phase two of a clinical trial of ISIS 2302. After a single course of treatment (26 days, every other day), the drug produced remission in seven of 15 trial patients and significantly reduced or eliminated steroid requirements in the remaining eight. Steroid use can cause swelling of the body, deterioration of the bones, and can precipitate or exacerbate diabetes, says Yacyshyn. Prolonged use can result in osteoporosis and immune suppression.

Testing of ISIS 2302 is far from complete, but because it targets a specific human genome, so far it appears to cause none of the side affects associated with traditional drugs, aside from a slight and predictable increase in blood coagulation. Moreover, says Yacyshyn, benefits were still evident well after 140 days.

"We're able to use a molecule that gets in under the immune system and doesn't cause a problem in and of itself. That's the beauty of this new technology—it potentially offers us a way to treat these conditions...without the patient being sick as a result of the therapy." Discovered by ISIS Pharmaceuticals of California, the trial's sponsor, the drug is a chemically altered DNA molecule designed to block the RNA message responsible for producing inflammatory proteins.

Crohn's disease is a chronic condition causing inflammation of the colon and rectum. Common symptoms are abdominal pain, diarrhea and/or constipation,

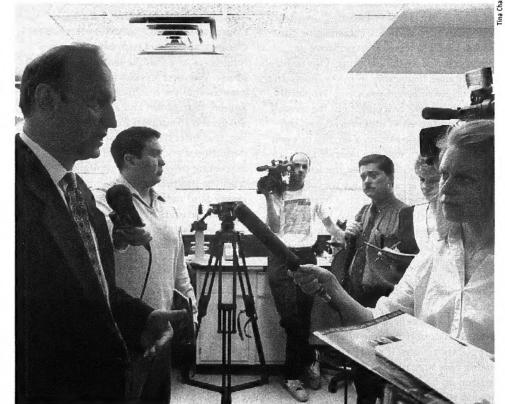
ranging in severity from mild discomfort to debilitating weakness and pain. Victims may also suffer weight loss, rectal bleeding and fever.

For some unknown reason, the disease is more prevalent in northern climates, says Yacashyn. It can affect anyone at any time, although it tends to hit people in their early 30s with higher frequency.

"It occurs at a time when these people are establishing families and careers. It causes problems at home and at work, and then comes and goes without warning over the course of a person's lifetime." Severe cases can be helped with surgery, but as medications improve, says Yacyshyn, invasive therapy will hopefully become less necessary.

The ISIS 2302 trial was the first time this class of drug, called "antisense," has been tested in humans. Yacyshyn says the new technology could potentially treat a number of diseases. In addition to Crohn's, it is now being tested in cases of rheumatoid arthritis, colitis and psoriasis. It also has potential use in transplantation, as an anti-cancer agent, and as an anti-viral treatment for infectious diseases.

Results of the second phase of the clinical trial have been published in the June edition of the medical journal, Gastroenterology, for global distribution. A third phase of the trial is now underway with 300 patients in 35 centres in Canada, the U.S. and Europe. Yacyshyn is unable to say just when the drug will be available to the public, but hopes it will be "in the foreseeable future."



Dr. Bruce Yacyshyn discusses phase two of a clinical trial of ISIS 2302 with media.

Education class of '33 celebrates 65 years of friendship

By Roger Armstrong

Sixty-five years ago, in the middle of the Depression, the 1933 class of what was then the Edmonton Normal School Education Program graduated. Only a third of the grads found work in that first year. Most had to turn to other professions to make a living.

"I was one of the fortunate ones to get a school that year," says Dave Cooney, a major force behind a series of reunions over the past 65 years, the latest June 3.

Cooney values the friends he made in 1933. He published a book about his class in 1988 and has attended every reunion. With his 46 years of continuous service, Cooney, 84, considers teaching one of his most rewarding experiences.

Art Elliott was another of the original 252 grads in 1933. "We were like troops in the war," says Elliott. Unlike today, the students took all classes together and even sat in the same seat for each different lecture. "Sixty-five years later, we are still friends and getting together."

Despite the Depression, the class managed to find entertainment. Elliott recalls that one of the five classes in the program put on a kind of talent show each Friday. This was followed by a tea and then a tea dance, for which the school had its own band.

Elliott's first job paid \$60 a month for ten months. "Officially the minimum salary was \$840 a year. I wish I was paid that," says Fred Bentley, a fellow classmate, who also received \$600 per year. "We considered ourselves fortunate, lots of people were unemployed and at that time there were lots of hardships," says Elliott.

The challenges were many for young teachers entering the profession. The year

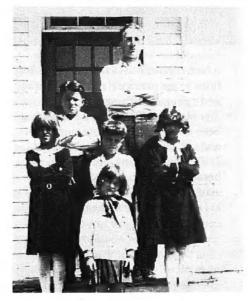
following Normal School was to see if you could survive, says Cooney. The jobs were far from home, in one-room schools, teaching Grades 1 to 9. The Faculty of Education replaced the Normal School and modern education and approaches are very different. Elliott says the education available to teachers today is much more helpful in preparing them for the challenges they will face.

Given the chance, both Cooney, and

Elliott would do it all again. Elliott's most memorable teaching experience came when an inspector paid his class a surprise visit and asked his Grade 1 class to read aloud. He had set up a system where his higher-grade students helped the lower ones. When the Grade 1s read, the inspector was so impressed he said Elliott's was the best reading class he had ever heard. "And I just gave [the helpers] a nod," says Elliott. Both he and his students beamed with pride. This system of the older students helping with the teaching was a survival tool back then but Elliott feels it can be used effectively today as well.

The friends plan their next reunion for 2003. ■



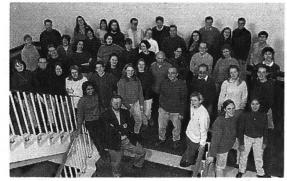




Top: Early frivolities in Pembina Hall Left: Fred Bentley with an early class Right: (L to R) Fred Park, Charles Knight, Dr. Arthur Elliott and Walden Smith

Madrigal Singers capture CBC prize

By Geoff McMaster



Dr. Leonard Ratzlaff and the 1996/97

The University of Alberta Madrigal Singers have won their third national choral award. The group of 38 singers, conducted by Dr. Leonard Ratzlaff, took first prize in the CBC's biennial Choral Competition for Amateur Choirs in the mixed choir category. They receive \$3,000 in prize money, adding the title to previous wins in 1996 and 1992.

Ratzlaff says the group's success, along with that of other city choirs, is a testament to Edmonton's strong choral tradition.

"The so-called raw material of singers coming into our program...makes it possible for us to do this," says Ratzlaff. "It's not just the work we do here—we're already working with some fairly talented people when they come in. There's a lot of activity in community and youth choirs, and there are a few high schools that are very active in music programs."

Two other Edmonton choirs also secured gold and silver in the CBC competition. The Belle Canto Singers, led by former U of A graduate student Heather Johnson, landed first prize for best women's choir, and the Swiss Men's Choir of Edmonton took second prize in the cultural choir category. All submissions were taped, and the awards were announced in Halifax at the Canadian Choral Conductors "Podium 98" Conference in early May.

The Madrigal Singers were formed in 1974 by Dr. Larry Cook, who felt there was a need for a small ensemble to compliment the music department's full concert choir. True to their name, the singers initially performed only the madrigal, a secular song on love or nature with roots in the early Italian Renaissance, sung in several parts without accompaniment. As the choir grew, however, it quickly moved beyond the limitations of this form.

"We do all kinds of different music now, sacred as well as secular, with all different kinds of instrumental accompaniments and sometimes without," says Ratzlaff. "There's such a vast repertoire for choir out there. We do still sing madrigals, of course, but it only forms a small part of our repertoire."

Since the singers have established a reputation with their name, Ratzlaff has been reluctant to change it. And yet it is indeed flexibility that makes this ensemble shine.

In the mixed choir category, for example, one of eight in the CBC competition, singers were required to demonstrate skill in a range of styles. In addition to one contemporary Canadian madrigal by Healey Willan, they also performed a Latin motet (a sacred, antiphonal piece) by Lassus, a 19th century German prayer song by Hugo Wolf, and a French song by Dutch composer Henk Badings.

Those interested in hearing the Madrigal Singers should stay tuned to CBC Radio's *Our Music* on Sunday afternoons, says Ratzlaff. A concert recorded in March should be broadcast this summer or early fall. The group will also give a concert next April in the Winspear Centre before taking off for Cork, Ireland on tour.

Selling human genes

By Roger Armstrong

There are pros and cons, but one thing is clear—the human gene is becoming a commercial product.

Seventy-six per cent of patents granted in the area of human genetics are privately held and Tim Caulfield, research director for the Health Law Institute, says individuals, patients, researchers and corporations—not the state, control decisions about genetic research and the use of genetic services. "...And those individuals are going to be influenced by the market."

Market involvement is not necessarily a bad thing, says Caulfield. "There is no doubt that the private sector money is more flexible and it helps with the rapid dissemination of technologies."

If a company identifies what a gene does, they can patent the actual gene. Any other company or researcher is then free to continue researching the gene, but they can't market any drug they develop without an arrangement with the original company.

There are also concerns about a changing morality and a skewed sense of how we define "normal," he says. "For example, some people believe that subtle marketing occurred around the sale of a genetically derived growth hormone,...[and this] will impact how people view height as a disease," he says. Demand for the hormone has dramatically exceeded the original estimates of the need, raising the question of whether or not our perception of who has a medical height problem has widened to include people previously considered just naturally short.

On the plus side, demand for the genetically derived growth hormone has increased its availability and decreased the cost of production, says Caulfield. This has

allowed researchers to explore different uses for the growth hormone, resulting in an expanded market.

Given the current genetic revolution, this change in perception of what is normal is a big concern as privately owned, profit-driven companies have a lot to gain by convincing us we need fixing.

And we're an eager market. "In our society and probably most societies in the western world, the idea of autonomy, of individual choice is so dominant. Particularly when you are talking about things like reproduction and health-care decisions," says Caulfield. If an individual wants to be tested for a particular gene known to cause an illness, who will stop them?

And once a person has been identified with the offending gene, what effect will that have on the individual's health insurance, their actions or their psyche?

According to Caulfield, there is evidence scientists involved in genetic research are under increasing pressure to be secretive to protect their discoveries from market competitors. While it can be argued that scientists have always been secretive about their research, it is a cause for concern when we have much to gain by scientists sharing discoveries as they happen.

The rush to market therapies also brings the risk that genetic services will be implemented before their efficacy has been proved.

But while it's all uncharted territory, Caulfield is optimistic that government and private corporations will find the delicate balance needed to control the gene services market so that public health remains the top priority.

Community builders honored

Dhilanthropists, museums, teachers and police all received special U of A honors last week as the University of Alberta recognized eight groups with one-time Builders of Alberta Awards for their significant contributions to the province.

The awards were created as part of the U of A's 90th Anniversary celebrations and are designed to recognize outstanding contributions to the social, economic, educational, cultural, business, health and professional dimensions of Alberta's growth since 1908.

The University of Alberta Senate chose the following eight recipients who were honored at a dinner May 22 at Fort Edmonton and recognized during convocation ceremonies .:

- The Alberta Association of Agricultural Societies/Rural Education and Development Association were acknowledged for being among the agricultural cooperatives that have continually provided a unique means to support rural communities in growing and prospering economically, educationally, socially and culturally.
- The Alberta Teachers' Association was incorporated in 1918 and was cited for being a major partner in the development of high quality education in Alberta schools. Both separately and in cooperation with others, the ATA has contributed to the growth of education and the building of a world-class system for the province.
- CKUA Radio Network, born at the U of A in 1927, was recognized for con-

tinuing its commitment to education throughout its privatization. The station reaches 85 per cent of Albertans through satellite delivery and continues to offer unique programming strengthened often

BUILDERS

Awards

by partnerships with post-secondary institutions.

 Eric Harvie Family/ Devonian Group of Charitable Foundation/ Glenbow Alberta Museum Archives and Library: The Harvie family has supported the province extensively through diverse philanthropic

endeavors. Chief among these have been the establishment of the Devonian Foundation and Glenbow Museum which continue to make vast contributions to the province's social, economic and cultural wellbeing.

 The McCuaig/Rutherford Family has been serving the province since Alexander Cameron Rutherford arrived in 1895 to practice law. He went on to become Alberta's first premier and established the University of Alberta in his constituency, the then City of

Strathcona. He served on both the U of A Board of Governors and Senate. The McCuaig side of the family began their association with Rutherford through partnership in the legal firm and

were eventually linked through marriage when Stanley McCuaig married Alexander Rutherford's daugh-

ter, Hazel. The family continued Rutherford's support for education, founding several scholarships. Hazel McCuaig's dedicated service to the university was recognized in 1964 with an honorary doctor of laws degree in 1964.

In addition, Eric McCuaig, QC, Rutherford's grandson recently served the University of Alberta Senate.

 PCL Construction Group Inc. evolved out of Poole Construction, which was founded in Saskatchewan in 1906. Bought out by employees in 1977, today's PCL Construction Group is one of the largest contractors in Canada. PCL has very literally been involved in building Alberta's roads, dams, bridges, power and water treatment plants, offices, apartment complexes, sport and leisure centres and hotels.

PCL built both Edmonton and Calgary airports as well as the highly acclaimed Francis Winspear Centre for Music in Edmonton. The Poole family, from company founder, Ernest, through to his sons John and George has provided outstanding philanthropic support to a wide range of projects throughout the province.

- The Royal Canadian Mounted Police were founded in 1873 as the North West Mounted Police. Since then, they've been an integral part of Alberta history-and that of Canada. In particular, they are being recognized for retaining the personal contact that made their pioneering policing efforts so successful. Their current philosophy, which stresses community policing, continues to ensure a safe environment for Alberta's, and Canada's, citizens to prosper and build.
- · The Salvation Army first came to Alberta (then the Northwest Territories) in 1887. Since then, the Salvation Army has worked tirelessly relieving the suffering of soldiers in two World Wars, helping dislocated and hungry people through the Depression, founding homes for single mothers, seniors' homes, addiction recovery centres, a suicide prevention program, disaster services and programs for seniors. By building a "safety-net" system for Albertans in need, the Salvation Army has helped build Alberta.

Three's company at convocation ceremony

Grandfather, mother and son share the stage

By Lucianna Ciccocioppo



Three generations of educators: Ann Manson, Dr. Fred Bentley her father and her son Rob Manson

is a former dean of agriculture and 1992 honorary degree recipient. Ann Manson teaches education students a course on the current realities of the classroom.

They're not the only ones with a teaching background.

"The interesting thing is our family is dedicated to teaching," said Bentley. "My wife too...We believe in what we're doing," said the obviously proud and grinning grand-

Manson likes to joke teaching was in Rob's blood. "I was pregnant with him when I started my master's degree and he was a toddler when I finished." And despite the many degrees among all the fam-

ily members, convocation is never an obligation.

"My parents always went to convocation," said Manson. "It's always a big deal."

I was pregnant with him when I started my

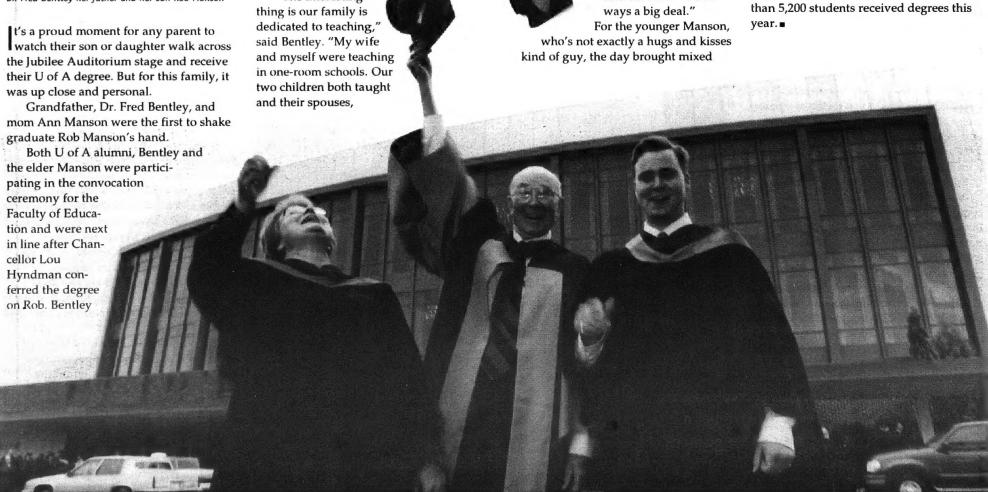
master's degree and he was a toddler

when I finished.

—Ann Manson

emotions. "It was great. [But] for them to be up there was kind of weird."

The class of 1998 is the largest graduating class in the history of the U of A. More



From good hands to good hands

Chancellor Lou Hyndman finishes a term filled with accomplishments

By Phoebe Dey

veryone knows about his accomplished Cresume, his posts in the provincial and federal government, his membership on various local and corporate boards, his active law practice with Field Atkinson Perraton.

But there's another side to the fifteenth chancellor of the University of Alberta.

He drives a 23-year-old Ford pick-up truck with the Senate license plate on the front. He lets his dog take him for walks. And the most recent book he read was "Snow falling on Cedars," by David Guterson.

But what stands out most about Chancellor Lou Hyndman is his love and commitment to his alma mater.

"When I arrived here as an extremely quiet high school graduate, I got involved in debating, model parliament and as the arts representative on council," said Hyndman, whose post ended when Lois Hole took over June 9. "It was those activities plus my discipline that my studies in history, arts and law gave me. They trained me how to articulate in writing and orally what I believe.

"So I have to credit this university as the single most important reason for any success I might have had," said the former minister of education, minister of federal and intergovernmental affairs, government house leader and provincial treasurer.

Twenty-six years after Hyndman was elected student union president, he returned to the campus as the ceremonial head of the university. When Hyndman first signed on as chancellor, one of his plans was to raise the university's profile in northern Alberta, the country and the continent. With the help of others, he has succeeded.

"Along with the president and chair of the Board of Governors, we've been able to enhance and raise the profile of the University of Alberta as an institution becoming indisputably recognized as a top flight place of unique excellence," said Hyndman.

Former student union president Stephen Curran agrees. "Just being able to attach the university's name to Lou Hyndman's has helped. And even though he hasn't been a student here in years, he's sympathetic to students' needs."

Aside from his professionalism and hard work, Curran said another quality will always be associated with Hyndman.

"When he spoke to a crowd everyone seemed to hush and listen to what he had to say," said Curran. "He was a past [student union] president and student here but he spent most of his life in the political realm away from the school. Yet he was able to come back after 30 years and command that kind of respect. Few people can

What Hyndman has also done is launch several initiatives during his time



on campus. A \$15,000 Chancellor's Scholarship and a \$20,000 President's Scholarship were introduced during his term. Along with the registrar's office, he increased the degree of friendliness and sizzle to convocation ceremonies, making them so popular there are not enough seats for all who want to attend.

But what seems to give him the most pride is the increase in recruitment over the past few years. Finding the best and brightest students across the nation is beneficial for years to come, said Hyndman.

"What this does is enhance the profile of the university by giving it an even greater reputation for excellence," he said. "That attracts the best researchers, the best professors, the best teachers. When you have that you have a place people will want to attend. And that's a beginning."

For Hyndman, the U of A is also a family thing. His father, the late Louis Hyndman Sr., graduated from law in 1929. And his three children are alumni. His eldest daughter Jennifer is now assistant professor in human geography at Arizona State, his son Bruce an actor in Toronto, and Peter, his youngest, is in marketing in Edmonton. Hyndman's wife Mary is also an integral part of the U of A. She holds a U of A BA in languages and is now director of campus Services for Students with Disabilities.

"He is very grateful to have the opportunity to serve this institution," said Mary. "He holds the university very close to his heart. But I have no doubt he'll make this transition with ease."

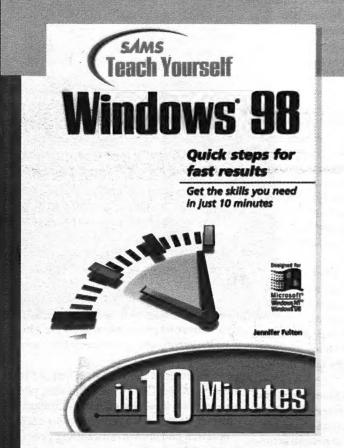
She hopes to spend any extra time they now have on the golf course. He will soon find out if he enjoys the game as much as he did before his four-year term at the university.

"I found this to be the best volunteer job in the province," said Hyndman. "I don't have a single regret. And I'm so excited about the upcoming chancellorship of Lois Hole. She is a person with special talent and energy, a leader who would be exactly the right person at the right time as we move into the next century," he said. "I'm really excited about her potential."

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1998 HONORARY DEGREE RECIPIENTS

MR. JOHN FERGUSON, CHAIR, CHIEF EXECUTIVE OFFICER AND FOUNDER OF PRINCETON DEVELOPMENTS LTD.



June 1, 1998
John Ferguson
was chair of the U
of A Board of Governors from 1994 to
1997 and currently
chairs Research
Technology Management Inc.
(RTM), a company

100 per cent owned by the U of A. His own company, Princeton Developments Ltd., has grown to be a major player in Canadian commercial real estate development and a world leader in cold weather climate property development. Ferguson holds a number of other corporate directorships including Royal Bank of Canada, Suncor Inc., TransAlta Utilities, Barbican Properties Inc., and Bellanca Developments Ltd.

His advice to Faculty of Education graduates:

"... It is the world of global innovation that will create wealth for tomorrow. It is the innovative thinking of our minds and of our young people that will create the economy of tomorrow. It will bring us wealth, or not. It will bring us high quality of living, or not. It will bring us a future for our children, or not. It is up to you! So let's go forward together into the 21st Century and insist that Canada be one of the most highly competitive knowledge-based economies in the world by educating, training and retaining the very best and brightest people. People not unlike those graduating here today.

DR. MAXWELL LEO HOWELL, BRISBANE, AUSTRALIA, INTERNATIONALLY RECOGNIZED PIONEER, SCHOLAR AND ADMINISTRATOR IN THE DISCIPLINE OF PHYSICAL EDUCATION AND SPORT.



June 2, 1998 Dr. Howell represented Australia in 30 international rugby union matches before dedicating himself full time to academia. His education included an

EdD at the University of California (Berkley) and a doctorate in sport history at the University of Stellenbosch (South Africa).

He was a pioneer in the development of Canadian graduate programs in physical education. He was instrumental in creating the masters degree program at UBC—the first in the Commonwealth—and in starting the first PhD program here at the U of A.

His advice to law, business and physical education and recreation graduates:

"...I could go on about what I have learned from life, but the glory of youth is generally to ignore the admonitions of the aged. It is a pity, because, if nothing else, as you get older you learn to appreciate the rolling of the waves, the quietness of a hot summer night, the movement of the leaves in a tree as the wind plays upon them, the glory of enduring and lasting love, friendships and children...because you know that every day is a plus, that life is all so very fleeting. Yes, you know that every day is a plus and should be enjoyed.

"...To be successful in business or sport requires the development of character and discipline. We are not born with a particular character of discipline, these are learned characteristics, learned in the valley of experience. Success requires strength of character and sacrifice, or discipline. If you want to win, an individual has to pay the price. A person once said: 'Nearly all victories are won by people who need not have tried—but did.'"

MR. RAYMOND J. NELSON, LLOYDMINSTER, FOUNDER NELSON LUMBER COMPANY LTD.



June 3, 1998
Raymond Nelson founded Nelson Lumber in 1946 with his late brother Austin.
Together, they pioneered the concept of prefabricated packaged homes at

affordable prices. Today, the company designs and produces homes throughout Western Canada and exports them to the U.S., Japan and Europe.

Nelson has been deeply involved in community affairs. He serves on the Board of the Alberta Treasury Branches, the Board of Regents for Athol Murray College of Notre Dame and the Board of the National Foundation for Family Research and Education.

His advice to graduates in science, agriculture, forestry and home economics:

"...I leave you with some things I have learned:

- "I've learned that regardless of color or age, we all need about the same amount of love.
- I've learned that one's greatest wealth is the freedom to choose.
- I've learned to measure twice; cut once.
- I've learned that if you give a pig and a boy everything they want, you'll get a good pig and a bad boy.
- "I've learned that most people are honest.
- ...I've learned that it's best not to quit at quitting time.
- I've learned that singing Amazing Grace and How Great Thou Art can lift my spirits for hours.
- I've learned that there are no unimportant acts of kindness.
- I've learned that if love isn't taught in the home, it's difficult to learn it anywhere else.
- I've learned that integrity and reputation are our most valuable assets.
 Never lie—ever....
- ...I've learned that the greatest risk is in thinking too small. The danger is in the comfort zone.
- I've learned that today it is much more difficult to lead that it once was. Power is more dispersed. Public opinion is more volatile.
- I've learned there are no rights without responsibility."

PROFESSOR ROGER WOODWARD, SYDNEY, AUSTRALIA, INTERNATIONALLY ACCLAIMED MUSICIAN

June 4, 1998

Roger Woodward is the founder of the Sydney International Piano Competitions, the London Digest Music Festival, and the Sydney Spring International Festival of New Music and Visual Arts. He is sought after as one of the finest artists of his generation for his dedication and insight into the Classical and Romantic repertoire.

He has recorded over 40 discs, many of which received gold awards and has performed many world premiers by numerous composers. He has performed extensively with the five London Orchestras, beginning nine seasons at the Royal Alberta Hall for BBC London Proms.

His advice to graduates of the Faculty of Graduate Studies and Research, medicine, dental surgery, medical science, medical laboratory science and dental hygiene.

"...The spirit of any nation is reflected nowhere more truthfully than in the contributions and achievements of its creative

thinkers and scholars—as Beethoven commented, just before composing his monumental B flat 'Hammerklavier' Piano Sonata, 'Only the artist or the free scholar carries his happiness with him.' What you achieved within these walls and continue to strive for will become the nation's 'culture'-that most tender part of our expressive selves, which is passed on in sacred trust, from one generation to the next. All of us are more dependent than ever before on the beauty and quality of your dreams, your hopes, but even more particularly, on your willingness to be brave enough, when the time comes, to speak up and to take the initiative when your conscience demands it, with all matters to do with human rights and the expression of personal and cultural freedoms.

You can be sure that Dostoyevsky was right when he declared: 'Beauty will save the world' and that commences with our ability to be tolerant of views and cultures different from our own, and our basic respect for each other..."

DR. JOSEPH BOYD MARTIN, DEAN OF THE FACULTY OF MEDICINE AT HARVARD MEDICAL SCHOOL



June 8, 1998
Dr. Joseph
Boyd Martin received his medical degree from the U of A in 1962. Following that he completed a PhD in the Department of Anatomy at the

University of Rochester. He was appointed assistant professor at McGill University in 1970 and moved to chair of the Department of Neurology and Neurosurgery at

McGill before being appointed as Bullard Professor of Neurology, Harvard Medical School in 1978. He was also chief of Neurological Services at the Massachusetts General Hospital, the premier academic physician post in neurology in North America. In 1989, he became dean of the School of Medicine at the University of California in San Francisco. He later served as chancellor at the University of San Francisco before returning to Harvard in 1997 as dean and holder of the Caroline Shields Walker Professorship in Neurobiology and Clinical Neurosciences.

His advice to graduates in engineering, pharmacy, nursing, rehabilitation medicine, occupational therapy and physical therapy:

"...Find a way to protect and nourish your intellectual vigor. In other words, do not graduate. Remain a scholar of your discipline—to do otherwise will only guarantee obsolescence. As Alan Gregg said, 'the best education should leave much to be desired.'

"Cultivate some accomplishment in a field that will complement your profession, perhaps as a musician or a painter. It is too easy to drift into complacency as a recipient of our culture, but fail to contribute to a form of creativity. Choose an area of engineering, nursing, rehabilitation, physical or occupational therapy, or pharmacy in which you can become an expert, even if it is only so that you know more about the topic than anyone else. Everyone needs an arena in which to exercise intellectual experimentation...

"...Second, pay attention to your families, both those who helped you to accomplish what you celebrate today, and those that you have—or will have—brought into the world. Figuratively speaking, try to be home for dinner each evening, even if you must return to work later that night...

"

Physicist and "film director" lands inaugural Martha Cook Piper Research Prize

By Lucianna Ciccocioppo

He could have just as easily been a writer. Dr. Mark Freeman found English literature as enjoyable as his physics courses way back when.

But it was the hands-on aspect of science that lured him into a lab for good. A B.Sc. from the U of A then a PhD from Cornell with 1996 Physics Nobel Laureate Bob Richardson launched his scientific career.

After 14 years in New York state, Freeman was happy to return to the U of A, his alma mater, with his state-of-the-art picosecond laser spectroscopy lab with him, and settle in his hometown. It's a change from working at IBM's Yorkton Heights lab, one of the U.S.'s best industrial research institutions.

"I love the ability to do research and to interact with lots of students and colleagues...Basically, I always planned long term to be back at the U of A. When the opportunity arose to come back here, it was irresistible," said the associate professor of physics.

Freeman's research is a hot topic. "We think we know how to make movies of atoms." That's in the long run, he explained. So far, Freeman has one "director" credit for the world's fastest movie: it covers an elapsed time of 10 nanoseconds. (For the scientifically challenged, that's 10 billionths of a second.)

Meanwhile, as he and his colleagues work on this, they are also developing new microscopy techniques to investigate and observe new phenomena in nanostructures.



Dr. Mark Freeman receives his Martha Cook Piper Research prize from Dr. Roger Smith, vice-president research and external affairs at convocation June 8.

Motivated by healthy curiosity, Freeman says scientists "...can look at things we were never able to look at before."

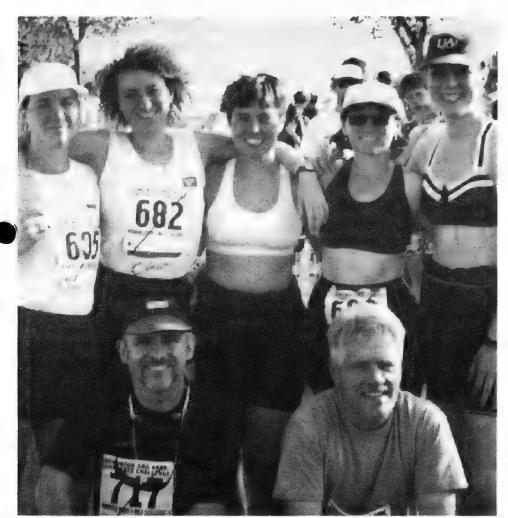
The research can also be used "to further miniaturize electronic and computer information storage devices." Things like transistors and microchips, said Freeman.

"We need these methods for practical applications, as well as to understand the fundamental physics that limit the ultimate performance of these devices and technologies."

Freeman is the 1998 recipient of the Martha Cook Piper Research prize, which recognizes a faculty member in the early career stage, with a reputation for original research and shows outstanding promise as a researcher.

U of A rises to Corporate Challenge

By Lucianna Ciccocioppo



U of A five-mile run team: clockwise lef to right: Christina Weiss, Aminah Fayek, Michelle Gaucher, Louise Jenkins, Lucianna Ciccocioppo, Fran Trehearne and Doug Poff.

AN OPEN LETTER

TO THE CAMPUS

GLENN HARRIS,

VICE-PRESIDENT,

Administration

FINANCE AND

COMMUNITY FROM

bout 125 U of A staff and faculty were Amotivated to participate in the 1998 Corporate Challenge Games and bump the team up to sixth place overall, a tie with Worker's Compensation.

That's a one-place improvement over last year, says U of A coordinator Barbara Hepperle. Telus Communications placed first out of the 27 companies in our division.

The U of A scooped six medals: a gold in table tennis; a silver in badminton; and three bronze in slo-pitch, soccer and squash.

Hepperle, a research technician, was on the squash team and says the battle came down to an old rival. "We beat Telus last year. And they beat us this year."

But the games are not about elite athletes competing in competitive sports.

"This whole idea is for stress reduction, to go out and have fun and meet people in the community. We're trying to increase the university's profile in the business community," says Hepperle.

Last year, no one from the U of A showed up for either the opening or closing ceremonies. This year was different with a good-spirited tug of war drawing crowds on the last day, says Hepperle.

Final results are available on the Web after June 15 at http://www.corporate challenge.alberta.com/alberta/ CORPCHAL/com_standings.html

1998 FACULTY OF SCIENCE SPRING GOLD MEDALISTS

LIEUTENANT-GOVERNOR'S GOLD **MEDAL: RONNIE CHEUNG**

Ronnie and his family immigrated to Edmonton from Hong Kong in 1984. He has been the recipient of many awards and scholarships during his time at the U of A and was an active volunteer for the Campus UNICEF organization.

Currently, Ronnie is a research assistant for Dr. Paul Boothe, Professor of Economics. He will pursue his MA in the fall at UBC with a focus on public finance.

GOLD MEDAL IN SCIENCE: CHANDRA STEMPIEN

Chandra began her post-secondary career in honors chemistry, but transferred to the specialization program in math and finance in 1996. She has won numerous awards and scholarships during her time here. While at the U of A, Chandra spent summers as a research assistant to Drs. Palcic, Kotovych and Stryker in the Department of Chemistry.

Chandra plans to take a year off before starting a graduate program in math and finance at either University of Waterloo or University of Toronto.

DEAN'S GOLD MEDAL IN SCIENCE: HUNG CHANG

Hung was born in Taiwan and immigrated with his family in 1984. He has been the recipient of a number of previous awards and scholarships. During his summers at university, Hung's AHFMR studentships enabled him to work at medical research laboratories at the U of A with Drs. Janowska, Francis and Michalak. He made presentations of this research at two Students' Research Days.

Hung plans to travel in Europe this summer before starting the MD program at the University of Alberta.

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UNIVERSITY OF ALBERTA

Office of the Vice-President (Finance & Administration)

1-3 University Hall • University of Alberta • Edmonton • Canada • T6G 2J9 Telephone: (403) 492-2657 • Fax: (403) 492-1439

AN OPEN LETTER TO THE CAMPUS COMMUNITY

June 12, 1998

The Finance and Administration portfolio continues with the major renovations which began in the past year. Now we are looking at service and process improvements within each of the sub-systems; always an unsettling but we believe ultimately, a rewarding process for both staff and client groups on campus. However unsettling, it's a necessary part of doing business in our rapidly changing environment.

In the last few months, changes within Supply Management Services (formerly Materials Management) have begun to impact the campus community. With this letter, I'd like to assure you that changes in this service unit, and all changes within the portfolio, are taking place to support the University's strategic direction, in particular to maximize the resources available for our core teaching, research and learning activities. In so doing, our commitment remains to provide outstanding service to the University community. This demands that we adopt industry best practices in administration and the delivery of support services.

To this end, in the case of Supply Management Services, an extensive review by and independent consultant established that a number of improvements should be made.

What does it mean to the campus community?

- Less paper work and fewer purchase orders with a move to direct purchase through corporate credit cards.
- More price discounts and better service as we move to system-wide contracts with preferred suppliers.
- Improved on-campus delivery at lower cost with the integration of scheduled and dispatch/courier services.
- More classroom and work space with a new storage system that will discourage storage of unused furniture and
- Reduced bureaucracy with the integration of ordering, invoicing and payment processes.

In particular, the continuation of our Central Stores operation, which handles primarily paper and caretaking supplies cannot be justified. Industry standards suggest our turnover rate is only half what it should be for the annual operating costs expended. Clearly we can't justify the status quo. Therefore, we are closing Central Stores by November and will implement alternative supply management procedures.

What does this mean for staff? People will be displaced as roles change. No doubt there will be some job loss. Our plan is to deal with those affected through attrition, alternative employment opportunities within the University wherever possible and the provision of professional, career transition services. Everything we have achieved at this university has been the result of outstanding human effort. I assure you we haven't forgotten that human resources are our greatest strength. We hope to be as fair as possible in making the difficult decisions ahead.

As this and the many other improvements evolve, there will be growing pains. In the months to come, we'll be consulting with client groups to ensure that, as we implement these changes, you not only continue to receive excellent service, but also your needs are met with even greater effectiveness and efficiency.

Clean Harris

Vice-President (Finance & Administration)

GH/jlb

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Department of Housing and Food Services University of Alberta, 44 Lister Hall Edmonton, Alberta T6G 2H6 Tel: 403-492-4281 Fax: 403-492-7032

e-mail: conference.services@ualberta.ca http://www.hfs.ualberta.ca/



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The University of Alberta is committed to the principle of equity in employment. As an employer we welcome diversity in the workplace and encourage applications from all qualified women and men, including Aboriginal peoples, persons with disabilities, and members of visible minorities. In accordance with Canadian Immigration requirements, preference will be given to Canadian citizens and permanent residents.

LISTER HALL FACULTY-IN-RESIDENCE (FIR)

The Faculty-In-Residence program is an initiative of Housing and Food Services which provides mutual opportunities and benefits for faculty and the students of Lister Hall. The individual selected will live in a two-bedroom apartment in residence and serve as a liaison between faculty and students while encouraging intellectual stimulation and academic success of the residents. Working under the general direction of the associate director, housing and residence life, and in close relationship with the residence life coordinator, the FIR will work with residence life staff and the Lister Hall Students' Association in developing academic communities. Candidates will be appointed for a ten-month term, with the possibility of renewal.

DESCRIPTION: FIR will: facilitate the involvement of other faculty in residential programs; interact with students to enhance their learning and enjoyment of the residence and university experience; promote multiculturalism and diversity to enhance the environment for students from a variety of backgrounds; provide informal academic counselling and make referrals to other campus resources; participate in leadership workshop planning meetings during the month of August; attend and participate in select fall leadership workshop sessions beginning on August 21st; participate in new student orientation on August 30th; maintain 10 to 12 hours of resident contact per week within the residence; and provide a semester summary report of activities.

QUALIFICATIONS: Skills, knowledge and abilities necessary to perform assigned functions; a strong interest in the holistic development of students both in and out of the classroom; knowledge of residential or similar group living preferred; must be a University of Alberta faculty member.

COMPENSATION: Two-bedroom apartment in Lister Hall as a taxable benefit of \$435/month, \$1000 per semester on a campus meal plan.

Position begins: August 17th, 1998 and ends May 31, 1999, with possible renewal.

SELECTION: The applicant should submit a letter of application, which indicates the applicant's interest and qualifications, two letters of reference and a resume/C.V. by July 22. Interviews will take place July 27—August 7, and a candidate will be selected directly after. Please send application materials to

Donna Chisholm, personnel coordinator **Housing and Food Services**

44 Lister Hall University of Alberta

Edmonton, AB., T6G 2H6.

For further information or a detailed job description, please contact Dima Utgoff at (403) 492-4281.

INTERNATIONAL RELATIONS OFFICER—ASIA

INTERNATIONAL RELATIONS DIVISION. UNIVERSITY OF ALBERTA INTERNATIONAL

University of Alberta International seeks a highly motivated, enthusiastic international relations officer with knowledge and/or experience of East and Southeast Asia to assist the University of Alberta in pursuing its internationalization initiative by developing and maintaining relations/activities which support the university's strategic goals in that region.

Candidates should hold a university degree, have strong analytical, writing and communications skills and be able to work successfully in cross-cultural settings. Work/study experience in East and/or Southeast Asia and/or knowledge of an Asian or Southeast Asian language would be a definite asset.

The position is offered on the basis of a two-year academic contract. As a member of the academic staff of the university, the IRO will be entitled to all university benefits for academic staff. The pay range is \$35,000 to \$40,000 a year.

Further information relating to the position, its reporting relationship and duties can be obtained by contacting University of Alberta International at 403-492-2958. Fax 403-492-1488 or email: international@ualberta.ca. Information regarding the university's international activities is available at http://pangaea.abintl.ualberta.ca/

To apply, please forward a resume and cover letter explaining why you are particularly qualified for this job to

Margo Nelson University of Alberta International. 2-10 University Hall **University of Alberta** Edmonton, Alberta T6G 2J9

Or fax: 403-492-1488 Deadline: Friday, June 19, 1998.

ASSISTANT PROFESSOR IN ADVANCED ASSISTIVE TECHNOLOGY

POSITION: A tenure-track position in advanced assistive technology at the assistant professor level in the Faculty of Rehabilitation Medicine with a joint appointment in the Department of Rehabilitation Technology at the Glenrose Rehabilitation Hospital.

QUALIFICATIONS: Applicants are sought with a PhD (or equivalent) in rehabilitation engineering, rehabilitation neuroscience and/or assistive technology with additional background and documented experi ence in applied rehabilitation science and/or one of the rehabilitation disciplines (e.g., physical therapy, occupational therapy, speech-language pathology, allied health science, applied health science). A research program and history of/potential for research productivity that will qualify the successful applicant for Alberta Heritage Foundation for Medical Research (AHFMR) and Natural Sciences and Engineering Research Council (NSERC) funding (or equivalent) are

CONTEXT: The Faculty of Rehabilitation Medicine at the University of Alberta includes 29 academic staff members. Most are affiliated with one of three departments, Occupational Therapy (OT), Physical Therapy (PT), or Speech Pathology and Audiology. A few, with expertise in assistive technology and rehabilitation engineering, epidemiology and biostatistics, neuroscience or degenerative spinal disorders. have Faculty appointments that are not associated with a specific department. The position advertised in this announcement would be an appointment at the faculty level.

The faculty offers two undergraduate degrees (BSc-OT & BSc-PT), and six degrees at the graduate level. Five of these are master's degree programs: three in speech-language pathology (MSLP-A; MSLP-B; MSc-SLP), one in occupational therapy (MSc-OT), and one in physical therapy (MSc-PT). The sixth graduate program offers an interdisciplinary PhD degree in rehabilitation science.

The Faculty enjoys a close working relationship with the Glenrose Rehabilitation Hospital site in Edmonton's Capital Health Authority, and with the Department of Biomedical Engineering in the Faculty of Medicine and Oral Health Sciences at the University of Alberta.

RESPONSIBILITIES: The position carries expectations for teaching, research and service that are common to all tenure-track positions at the University of Alberta.

Teaching expectations include involvement in and/or responsibility for coursework at the undergraduate and graduate levels in augmentative/alternative communication systems and assistive technologies in rehabilitation. The expertise of the person in this position also will be sought in the development of interdisciplinary coursework at the graduate level that includes content related to rehabilitation and assistive technologies.

Research expectations include the leadership and further development of the Advanced Assistive Technology Laboratory in the faculty, membership in and joint research activity with the Department of Rehabilitation Technology at the Glenrose Rehabilitation Hospital, and acquisition of external funding to support research in both venues.

Service expectations include the role of chair of the faculty's Technical Resource Group, assumption of some graduate student supervision, and committee work as appropriate at the faculty and university

APPLICATIONS: Please include a letter of intent, current curriculum vitae and the names and addresses of persons who can be contacted for letters of reference. Consideration of applications will commence August 31, 1998 and applications will be accepted until positions are filled. Inquiries and application materials should be made to

Albert M. Cook, dean **Faculty of Rehabilitation Medicine** 3-48 Corbett Hall University of Alberta Edmonton, Alberta T6G 2G4 CANADA Phone: 403-492-5991 Fax: 403-492-1626

RESEARCH CHAIR IN MOLECULAR **BIOLOGY OF BEEF CATTLE** PRODUCTION

The Department of Agricultural, Food and Nutritional Science at the University of Alberta invites applications for a Canada-Alberta Beef Industry Development Fund Chair in the area of molecular biology of beef cattle production. The appointment will be made at the associate or full professor level with a

balance of 75 per cent research and 25 per cent teaching.

The appointee will develop a world-class research and teaching program on the application of molecular biology techniques to the improvement of beef and beef cattle production. The chair is mandated to enhance cooperation between scientists and other stakeholders in an Alberta beef research network which includes the University of Alberta, Alberta Agriculture, Food, and Rural Development (AAFRD), and the Agriculture and Agri-Food Canada (AAFC) Research Centres at Lethbridge and Lacombe. The research program coordinated by the chair will involve the use of molecular techniques such as genomic analysis, linkage mapping and identifying genes responsible for variation in traits of economic importance, and the study of factors regulating gene expression. These molecular approaches will be integrated with experimental models currently in place in Alberta to study the physiological processes underlying production. The candidate will possess a PhD in a scientific discipline relevant to the study of the molecular biology of cattle, will have an estabshed research record in molecular biology and a ommitment to its application in research on bovine physiology and beef production. Demonstrated leadership ability, excellent communication skills and a strong commitment to technology transfer are es-

The University of Alberta has excellent on-campus research facilities and equipment, including a state-of-the-art Molecular Biology and Biotechnology Centre, numerous specialized analytical laboratories, a large animal metabolism unit, and a research ranch which includes a herd of 500 beef cows (for further details see www.afns.ualberta.ca). In addition, the chair will have access to AAFC research stations in Lacombe and Lethbridge which offer an additional range of facilities and research strengths in many complementary areas, including rumen microbiology/biotechnology and meat science.

Applications, including a statement of research and teaching interests, curriculum vitae, and the name of three referees should be sent by August 1,

Dr. John Kennelly, chair Department of Agricultural, Food, and Nutritional Science University of Alberta Edmonton, AB T6G 2P5

For further information on this position, contact Dr. Kennelly at Phone: (403) 492-2131, Fax: (403) 492-4265, Email: chair@afns.ualberta.ca or visit our web site.

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Project management will form a large portion of your job description. You will coordinate the licensing and collaborative research between industry and PENCE researchers to work together on highly confidential projects. Intellectual property management, including licensing agreements and patenting strategies, forms an essential component of your job description. You will coordinate and liaise on financial and legal matters pertaining to projects, and ensure that all key players understand the terms and conditions of partnering and abide by these conditions. You will be responsible for implementing strategies consistent with R & D agreements with industry, including regular project meetings with scientists and their students, postdoctoral fellows and research as-

An understanding of the intricacies of collaborative relationships across a variety of industrial, federal and academic agencies is a plus. An ability to deal with corporate agents, lawyers and businessmen is also a valuable asset.

For more information visit our website: www.pence.ualberta.ca

Please forward a covering letter and CV to Dr. R.S. Hodges, CEO, President, Scientific Director

University of Alberta

7-50 HMRC

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You may also submit your application via e-mail to colleen.iwanicka@ualberta.ca

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ROTARY CLUB HONORS BUSINESS PROFESSOR

Dr. Glen Mumey, chair of the Department of Finance and Management Science in the Faculty of Business, has been honored by the Southeast Edmonton Rotary Club with its Integrity Award. The award recognizes a person who has earned a reputation for character, service and selflessness

Mumey was particularly recognized for the research and commentary he has provided on Alberta financial institutions. He has published articles and publicly presented independent and critical financial analysis covering the Heritage Fund, the Alberta Treasury Branches and crown financial corporations.

DEPARTMENT OF DRAMA WINS EDMONTON THEATRE

The 1998 Elizabeth Sterling Haynes Award for outstanding Contribution to Theatre in Edmonton has been awarded to the University of Alberta Drama Department. In their letter informing the department of the win, the Awards Committee wrote, "It is a great honor for the committee to be able to recognize the invaluable contribution the department has made to our profession and to the entire landscape of theatre in our city."

The award is given annually by the Edmonton theatre community. In announcing the award, the department's Studio Theatre was lauded for its 50 years of challenging and inspiring drama that has taken Edmontonians on dynamic theatrical journeys with artists, directors and teachers like Tom Peacocke, Wilfred Watson, James DeFelice, Gwen Pharis-Ringwood, Gordon Peacock, and, the award's namesake, Elizabeth Sterling Haynes.

APOSTROPHES II DESIGNER WINS BOOK AWARD

Alan Brownoff of The University of Alberta Press has placed third in the 16th annual Alcuin Society's Citation competition for book design for his design of Apostrophes II by E.D. Blodgett, published by The University of Alberta Press.

Brownoff has won Alcuin Citations for three years running, in different categories each time. He received first prize last year for Propaganda and Censorship During Canada's Great War by Jeffrey A. Keshen. Flora of the Russian Arctic, translated by G.C.D. Griffiths and edited by J.G. Packer, was awarded a third prize in the text and reference category in 1996.

Submit talks to Tamie Heisler by 9 a.m. one week prior to publication. Fax 492-2997 or e-mail at public.affairs@ualberta.ca

ALBERTA HERITAGE FOUNDATION FOR MEDICAL RESEARCH

Howard J. Worman, Associate Professor, Medicine and Anatomy and Cell Biology, Columbia University, New York, "Inner Nuclear Membrane Biogentin." Presented by Cell Biology and Anatomy. 5-10 Medical Sciences Building.

BIOLOGICAL SCIENCES

MOLECULAR BIOLOGY AND GENETICS RESEARCH GROUP

esis and Interactions with the Lamina and Chroma-

June 15, 4 p.m.

Robert K. Herman, Professor, Department of Genetics and Cell Biology, University of Minnesota, St. Paul, "C. elegans Forward Genetics Leads to Wnt Signalling, Alternative RNA Splicing and Control of Muscle Attachment." This presentation is part of the Genetics 605 series. Co-sponsor: Alberta Heritage Foundation for Medical Research. M-149 Biological Sci-

CHEMISTRY

June 23, 11 a.m.

Ronald W. Woodard, Department of Chemistry and Pharmaceutical Chemistry, College of Pharmacy, University of Michigan, "Mechanistic Studies of Phosphoenol Pyruvate-Utilizing Enzymes: Targets for a New Generation of Antibiotics." E3-25 Chemistry

MEDICAL RESEARCH COUNCIL OF CANADA

June 22, 10 a.m.

Mark Bisby, Director, Programs Branch, Medical Research Council of Canada, "Transforming the Health Research Enterprise in the 21st Century." 6-28 Medical Sciences Building.

PERINATAL RESEARCH CENTRE

June 16, 4 p.m.

Kent Thornburg, Director, Congenital Heart Research Centre, Portland, Oregon, "Fetal Heart Development: Role of Pressure Load." 207 Heritage Medical Research Centre.

Please send notices attention Folio 400 Athabasca Hall, University of Alberta, T6G 2E8 or e-mail public.affairs@ualberta.ca. Notices should be received by 3 p.m. one week prior to publication.

CAREER WORKSHOPS

Career and Placement Services (CaPS) is offering the following workshops:

- **Career Planning**
- Tuesday, June 16, 12:30 p.m.
- **Creating Resumes & Covering Letters** that Work!
- Wednesday, June 17, 1:00 p.m.
- **Creative Work Search Strategies** Thursday, June 18, 11:00 a.m.
 - Job Interviews

Thursday, June 18, 1:30 p.m. For more information or to register, please call

492-4291 or visit our office at 2-100 SUB.

UNIVERSITY TEACHING SERVICES (UTS) SESSIONS

UTS is organizing its annual Orientation for Graduate Teaching Assistants at the beginning of the

Hello campus community!

This letter is to introduce you to a new working group on campus— The NASA/Presidential Liaison.

Some NASA members are working with the staff of the Office of the President to develop more effective ways to communicating with each other. Members include Sharon Jamieson, Office of the President; Betty-Anne Jansen, Planning and Development; Wally Haymour; Building Services; Sam Salloum, Technical Resource Group; Dorothy Turek, Libraries; and Jackie Dungavell, Office of the President.

Our goal over the next 18 months is to create and implement ways in which we can improve and strengthen the relationship between administration and NASA. Some of our ideas are to revive the summer BBQ, incorporate community service and volunteer recognition, highlight department and faculty profiles, and produce an "Ask the President" column.

We encourage you to participate by contacting one of us (through campus mail only) with your comments, suggestions, concerns, and questions for the president to N/PLC c/o 750 Extension Centre. Confidentiality is guaranteed.

We look forward to hearing from you!

Betty-Anne Jansen

academic term this fall. This year sessions will be held Monday, Aug. 31, Tuesday, Sept. 1 and Wednesday, Sept. 2 in the Tory Lecture Building (Tory Turtle). Sessions run all day from 9 a.m. to 9 p.m. and will be on a range of topics from various presenters. Sessions are free and all graduate students are welcome to attend. For more information, visit the UTS web page at http://www.ualberta.ca/~uts/

MCCUBBIN RETIREMENT CELEBRATION

Moira McCubbin and her husband Duncan emigrated from Scotland to Canada in 1965 and both began working at the U of A shortly after. Moira was biochemistry supervisor at SMRI for 21 years and moved to the Office of Environmental Health & Safety as chemical safety technician in 1986. She had a positive influence across campus with people who work with chemicals and with implementation of the Workplace Hazardous Materials Information System and the Chemical Spill Response Program. Moira has also worked closely with the Department of Physical Plant in the renovation of laboratories as well as the Asbestos Abatement Program and Air Quality investition and control.

We will be celebrating Moira's retirement with her at Alumni House June 18. All friends and colleagues are invited to an open house from 1:30 p.m. to 5 p.m. Contributions toward a gift are welcome; call Cindy Ferris at 492-1810.

RETIREMENT CELEBRATION, SOCIOLOGY

Friends, colleagues and students of Professors Les Kennedy, P. Krishnan, and Wayne McVey are invited to honor their valuable contribution to the Department of Sociology. Cumulatively, they have dedicated 90 years of service to the University of Alberta. For tickets to their retirement luncheon, contact Jim Creechan, 433-6130 or 492-9839. Email: jim.creechan@ualberta.ca. or call Car Dimitriou at 492-0472. The lunch is at noon on June 25 at the Faculty Club, and tickets are \$15 for students, \$20 for others, and \$45 for couples.

DIMIC AND MOZEJKA RETIREMENT CELEBRATION

All are cordially invited to a retirement celebration for Milan Dimic and Edward Mozejka, Department of Modern Languages and Comparative Studies. The celebration will be held June 25, 8 p.m. at the Papachase Room, Faculty Club, University of Alberta, \$15 per person. RSVPs at contributions for a gift may be left with Lois Larson, 492-4801.

Ads are charged at \$0.50 per word. Minimum charge: \$3.00. All advertisements must be paid for in full by cash or cheque at the time of their submission, Bookings may be made by fax or mail provided payment is received by mail prior to the deadline date. Pre-paid accounts can be set up for frequent advertisers. Please call 492-2325 for more information.

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ASPEN GARDENS, furnished four bedroom. Two storey, finished basement, southfacing backyard. July 15, 1998 - August 1, 1999. \$1,150. Janet Jenner-Fraser, Gordon W.R. King & Assoc, 441-6441.

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WALK TO UNIVERSITY - sabbatical home, furnished, 2000+ sq ft, custom built on quiet street. January - December, 1999. (403) 436-6513, marty.luckert@ualberta.ca

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GARNEAU, \$129,500 older 1 1/2 storey, three bedrooms, newer basement development. Ideal University location, Ed Lastiwka, Royal LePage, 431-5600.

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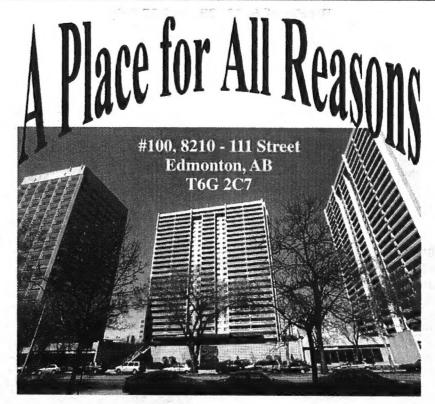
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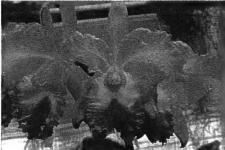
Color and fragrance explode at the U of A Devonian Botanic Garden

By Louise J. McEachern

As you open the door to the warmth of the humid greenhouse, you're lured by vibrant color, shapes, textures and the enticing fragrance of orchids.

The new Orchid House at the University of Alberta Devonian Botanic Garden (DBG) contains more than 500 different kinds of tropical orchids—species, hybrids, and varieties. "The collection is unique because no other facility in Edmonton has an open display to the public," says Dr. Dale Vitt, professor of biological sciences and director of the DBG.

Orchids—from the plant family Orchidaceae—have die-hard fans. There are orchid festivals and fairs, websites, and trade shows. They're even left in wills from time to time. The allure lies in their diversity. There are at least 30,000 wild species and more than 200,000 hybrids worldwide. "People are attracted to the enormous variety," says Sean Abbott, Ph.D. student studying fungi at the Devonian. "They are dramatic because their colors are vibrant, their fragrance intoxicating, and their blooms can last anywhere from six to eight weeks. Some



Cattleya Irene Holguin 'Brown Eyes



Encyclia cochleata

plants can produce more than 600 blooms, thereby increasing their appeal."

Orchids exhibit amazingly different shapes, forms, and growth habits. Some produce blossoms no larger than a mosquito; others as large as a dinner plate. Most require no soil. They come in four types, according to where they grow. Most are classified as epiphytes, or air plants, which grow primarily on trees. Lithophytes cling to rock surfaces. Saprophytes grow in decaying vegetation on the forest floor. Finally, there are terrestrials, which anchor themselves in soil or sand. As most orchids are epiphytes, they can be grown in tree bark (fir or redwood), crumbled charcoal, pebbles, on tree-fern or cork plaques.

Not all orchids are tropical. They are found almost anywhere including the barren Arctic tundra. They're tough and resilient, but grown from seed can take anywhere between five and 15 years to produce the first bloom, which increases their value.



Paphiopedilum Red Glory X Grand Master





Phalaenopsis Cassandra X Geralda 'Rainbow Peace'

A few orchid fragrances defy description, while others mimic familiar aromas—raspberry, coconut, lilacs, and citrus. Others have no scent, but rely on shape and color to attract insects or birds for pollination. There's currently a strong hint of coconut in the air at the Devonian, thanks to a *Maxillaria tenuifolia*.

Orchids are a must for human mating rituals—or at least significant occasions like graduations. But they induce a pretty spicy mating ritual of their own. While most flowers have separate male and female organs—the stamen and pistils—orchids possess a combination of the two and form a single structure called the column. The bloom is cleverly disguised to look like the female anatomy of a wasp or bee, which entices male wasps and bees in.



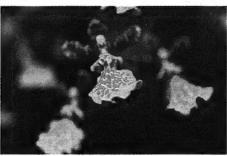
Once inside, the no doubt disappointed insect leaves, taking a sticky pollination sac with him. When the male is enticed into another orchid, (of the same variety) it deposits the sac in the reproductive organs of that plant.

Epiphyllum hybrid

For orchid fanciers, a simpler route is often artificial pollination, done by removing the pollinia with a toothpick and placing it on the stigmatic surface of the orchid. "This is actually a very simple process," says Abbott, although the seeds are tiny. "They produce a seed capsule, a pod-like structure, that can contain up to one million seeds no bigger than a speck of dust."

All orchids at the house were donated—with the largest collection from Howard Northey of Red Deer. A donor wall at the Devonian displays all contributors.

In addition to orchids, the greenhouse contains more than 100 types of other epiphytic plants including a collection of bromeliads—another air plant (epiphyte) adapted for dry conditions—and a collection of epiphytic cacti.



Odontocidium Susan Kaufman